

# Appendix 5

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## Data Sources and Methods

Data presented in Sections 1 and 2 of this report come from a variety of sources. Footnotes in the report provide information on the specific source and timeframe for each data point. The purpose of the information below is to provide additional details about data sources. Listed alphabetically below are the specific sources of data, the time frame in which the data were collected, and any additional information needed to understand the data.

### APHL

**APHL, *Public Health Laboratory Issues in Brief: Bioterrorism Capacity*; October 2002:**

APHL conducted the first survey in this series to establish a baseline status of state public health laboratories regarding bioterrorism preparedness as of December 31, 2001. Self-reported data were collected about personnel, facilities/biosecurity, clinical laboratory connectivity, equipment/supplies, transportation/courier service, integrated data management, and training from 46 states, 1 territory, and DC, for a 92% response rate.

**APHL, *Public Health Laboratory Issues in Brief: Bioterrorism Capacity*; May 2007:**

APHL conducted the fifth survey in this series to assess the effects of preparedness funding on state public health laboratory readiness for bioterrorism. Self-reported data were collected about funding, workforce, laboratory connectivity and integration, sample intake and laboratory testing, and reporting capabilities during the period from August 31, 2005 to August 30, 2006. All 50 states, DC, and Puerto Rico responded, for a total sample size of 52 with a 100% response rate. Puerto Rico's responses were not included in the data presented.

**APHL, *Chemical Terrorism Preparedness: In the Nation's State Public Health Laboratories*; May 2007:**

APHL conducted its third annual Chemical Terrorism Laboratory Preparedness Survey of public health laboratories to assess their capacity and capability to respond to chemical terrorism from August 31, 2005 to August 30, 2006. Self-reported data were collected on funding, testing capability and capacity, workforce, coordination and response planning, and all-hazards receipt and testing. Responses were received from 46 states and DC, for a response rate of 90%.

**APHL, unpublished data provided for 2006 and 2002:**

APHL provided unpublished survey data for the number of clinical laboratorians that participated in state-sponsored training to perform rule-out testing for biological agents. The training covered rule-out testing, packing and shipping, and biosafety guidelines.

### CDC

**CDC, DBPR EARS data; 2007:** Data about EARS consist of program information from DBPR in CCID.

**CDC, DBPR LRN data; 2007:** Data about the LRN consist of program information from DBPR in CCID. More details about LRN data follow.

- *Percentage of population within 100 miles of a LRN laboratory:* DBPR used census data for the year 2000 to determine the proportion of the U.S. population within 100 miles of a laboratory participating in the LRN. Analysis for this report was conducted in August 2007.
- *Number of laboratories within the LRN:* This report represents the number of LRN laboratories as of November 2007.
- *Laboratory testing for biological and chemical agents:* State and local laboratories in the LRN are subject to routine proficiency testing to confirm accuracy of testing for a range of biological and chemical agents. These proficiency tests are conducted throughout the year, and the data were updated as of September 2007.

**CDC, DEO data; 2007:** DEO tracks major events that may have public health consequences. CDC monitors and often responds to these major events.

**CDC, DEO Epi-Aid data; 2007:** These data consist of program information from Epi-Aid, a program of CDC assistance in epidemiologic field investigations on request from states, localities, and abroad. DEO coordinates these regular deployments of field teams throughout the year and records the number, type, length, and locations of field investigations.

**CDC, Division of Integrated Surveillance Systems and Services BioSense data; 2007:** Data about BioSense consist of program information from the Division of Integrated Surveillance Systems and Services in NCPHI.

**CDC, DSLR data; 1999-2005:** DSLR requested information from states regarding the progress made in preparedness from 1999 through August 30, 2005, at the end of the first five budget periods of the cooperative agreement.

**CDC, DSLR data; 2003-2006:** States were required to submit information annually on their preparedness activities during the reporting period from August 31 through August 30.

**CDC, DSLR data; 2007:** DSLR collected performance measure data from states, territories, and localities for budget period 7 of the cooperative agreement. Data presented in this report reflect the partial year period from September 1, 2006 through February 28, 2007. States will submit additional data for the latter half of the year.

**CDC, DSLR Mid-Year Progress Report Review data; 2007:** DSLR reviewed state public health departments' status in various areas of preparedness through narrative information reported as part of the cooperative agreement. DSLR uses the reviews to develop consultation plans and regional workshops to work on areas identified as needing improvement.

**CDC, DSNS data; 2001-2007:** CDC annually reviews state plans to receive, stage, store, and distribute pharmaceutical and medical supplies during an emergency. The review tool is based on a 100-point scale and covers 13 functional areas. Program consultants rate the plans based on the evidence provided and their professional judgment and experience. CDC uses review scores to help identify areas needing further improvement in planning and training. Scores were

presented for states with completed reviews from September 2006 through December 2007. One state did not have a complete review as of January 2007. DSNS also tracks the number of joint state and CDC SNS exercises, and data are presented for 2001-2006.

**CDC, DSNS Cities Readiness Initiative (CRI) data; 2007:** These data consist of program information from the CRI.

**CDC, *Epi-X* data; 2007:** These data consist of program information from *Epi-X*, a CDC communications system that helps track disease outbreaks. CDC's CCHIS maintains an active registry of qualified and trained users of the *Epi-X* system. The report presents figures based on end-of-calendar-year numbers of registered *Epi-X* users.

**CDC, HAN data; 2003-2007:** CDC's CCHIS tests states and localities' ability to respond to a test message within 30 minutes or less. The report presents data from 2003 through 2007.

**CDC, NCEH data; 2007:** Data consist of NCEH program information. NCEH works with state and local public health departments to improve response to chemical, nuclear, and radiological terrorism.

**CDC, Pandemic Influenza State Self-Assessments data; 2006:** As part of the cooperative agreement pandemic influenza supplemental funding, states and localities completed a pandemic influenza self-assessment in April 2006. Progress was reported in a number of key activities as "completed," "in progress," or "not started." Data were reported for 49 states.

## CSTE

**CSTE, *Epidemiological Capacity Assessment (ECA)*; 2006:** CSTE surveyed state and territorial public health departments in 2006 to determine the current status of core epidemiologic capacity, competence-specific training needs, and barriers to recruitment and retention of epidemiologists. The 50 states, DC, American Samoa, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands responded, for a 93% response rate. The 2006 ECA summarized 2006 data and changes in epidemiologic and surveillance capacity since 2001 and 2004 for the 39 public health departments that participated in assessments all 3 years.

## HHS

**HHS Press Releases; 2002-2007:** HHS publishes press releases on the amount of funding allocated to state, local, and territorial public health departments through the cooperative agreement.

**HHS OIG, *Status of State 24/7 Urgent Disease and Public Health Emergency Reporting Systems*; February 2005:** OIG reviewed public health departments' 24/7 urgent disease and public health emergency reporting systems and reported that 12 states and Los Angeles County had these systems in place prior to cooperative agreement funding in 1999.

**HHS OIG, Memorandum Report—Laboratory Preparedness for Pandemic Influenza;**

**October 2007:** OIG surveyed public health laboratory officials in the states and DC concerning their ability to conduct year-round influenza surveillance, among other critical tasks related to pandemic influenza.

**Methods for Developing Section 2 Snapshots**

State and local public health preparedness officials reviewed data presented in their respective snapshots. Corrections to the data during the specific time frames were accepted.

To develop text boxes on why public health departments value the cooperative agreement, CDC reviewed narrative submitted by grantees summarizing progress from 1999 – 2005. The text box was adapted from this information and reviewed by the relevant state or local public health department. Their changes were incorporated.

To develop examples of public health department responses or exercises, CDC reviewed documentation from partner organizations and grantee progress reports to identify a topic. These topics were then confirmed with the appropriate officials, and supporting materials were requested from state and local public health departments. CDC staff developed the examples based on these materials and submitted the content to the relevant state or local public health department for review. Their changes and recommendations were incorporated.

Most examples were developed using public health department documents. Sources for the examples outside of these documents are listed below.

**Multiple States**

ASTHO. State Public Health Successful Response Stories [online]. [cited 2007 Jul 30]. Available from URL: <http://www.astho.org/pubs/SuccessStoriesMainPage.htm>. Used to support examples for: Arkansas, Georgia, Missouri, Nebraska, Pennsylvania, Rhode Island, and Tennessee.

**California**

ASTHO. Public Health Preparedness: California – Heat Wave [online]. 2007. [cited 2007 Jul 30]. Available from URL: <http://www.astho.org/pubs/2007HillSuccessCA.pdf>

**Massachusetts**

Smith S. Outbreak stopped: Facing a potential measles epidemic, health workers employed high-tech alerts, old-fashioned quarantines [online]. The Boston Globe 2006 Jul 31 [cited 2007 Jul 31].

**New York City**

Chan S. New York City man has inhalation anthrax, officials say [online]. The New York Times 2006 Feb 23 [cited 2007 Aug 27]

## South Carolina

- Nieratko J. Train derailment highlights public health preparedness [online]. ASTHO Report 2005;13:1. Available from URL: <http://www.astho.org/pubs/FallASTHOReport2005.pdf>
- Hinshaw D. At least 220 treated at area hospitals. The State 2005 Feb 7; Sect. A-1 (col. 3)
- O'Connor J. Training, resources made response to leak smooth; much of S.C. ill-equipped for such a crisis. The State 2005 Jan 9; Sect. A-1 (col. 1)

## Utah

Testimony of A. Richard Melton, DrPH, deputy director, Utah Department of Health: Hearing before the Subcomm. On Bioterrorism and Public Health Preparedness of the Senate Comm. On Health, Education, Labor, and Pensions, 109th Cong., 2nd Sess. (2006). Available from URL: <http://www.astho.org/pubs/03-16-06MeltonTestimony.pdf>